

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-019466**Date Inspected:** 14-Jan-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1100**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** Gary Ehram**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Section**Summary of Items Observed:**

This Quality Assurance (QA) Inspector, Craig Hager was on site at the job site between the times noted above. This QA Inspector was on site to randomly observe Quality Control (QC) personnel perform Non-Destructive Testing (NDT) and to monitor American Bridge/Fluor (ABF) welding operations.

The following observations were made:

- 1) At weld joint 8W/9W -C2, inside the OBG section: ABF welding personnel Song Tao Huang (#3794) was using the Flux Cored Arc Welding (FCAW) process on a track system for production welding. QC Inspector Gary Ehram was monitoring the work.
- 2) At weld joint 8W/9W- F, inside the OBG section: ABF welding personnel Jorge Lopez (#6149) was using the Shielded Metal Arc Welding (SMAW) process for production welding. QC Inspector Gary Ehram was monitoring the work.
- 3) At weld joint 9W/10W- D1 and D2, inside the OBG section: ABF welding personnel James Zhen (#6001) was using the Submerged Arc Welding (SAW) process for production welding. QC Inspector Gary Ehram was monitoring the work.
- 4) At deck penetration weld joints; 2WPP15W4 and 2WPP17W3, inside the OBG section: QC Inspector Mike Johnson was performing Magnetic Particle Testing (MT) on production welds.

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At weld joint 8W/9W -C2, inside the OBG section this QA Inspector observed ABF welding personnel Song Tao Huang (#3794) using the FCAW process on a track system for production welding. This QA Inspector randomly observed as QC Inspector Gary Ehram verified the following parameters: 250 amperes and 24 volts at a travel speed of 277 mm per minute. The work observed at this location appeared to comply with Welding Procedure Specification (WPS) ABF-WPS-D15-3040A-3 and the contract requirements.

At weld joint 8W/9W- F, inside the OBG section this QA Inspector observed ABF welding personnel Jorge Lopez (#6149) using the SMAW process for production welding after the weld had been back gouged, inspected using both visual and MT and accepted by QC Inspection personnel. This QA Inspector verified the following welding parameters: 125 amperes using a 3.2 mm diameter E7018H4R electrode. This QA Inspector observed QC Inspector Gary Ehram periodically monitoring the work at this location. The work observed by this QA Inspector appeared to comply with ABF-WPS-D15-1040B-Rev-1 and the contract requirements.

At weld joint 9W/10W- D1 and D2, inside the OBG section this QA Inspector observed ABF welding personnel James Zhen (#6001) using the SAW process for the root and various fill passes this date. This QA Inspector randomly observed QC Inspector Gary Ehram verify the following parameters: 558 amperes and 32.2 volts at a travel speed of 380 mm per minute. This QA Inspector verified the following welding consumables were being used: 3.2 mm diameter ESAB filler metal- "Spoolarc 81" with "OK" flux 10.62. This QA Inspector observed QC Inspector Gary Ehram periodically monitoring the work at this location. The work observed by this QA Inspector appeared to comply with ABF-WPS-D15-4042B-1 and the contract requirements.

At deck penetration weld joints; 2WPP15W4 holes # 1 and #3 this QA Inspector was informed by QC Inspector Mike Johnson he had completed and accepted the visual MT inspection of the bottom of the welds. This QA Inspector performed a random visual verification and the work appeared to comply with the contract requirements.

At deck penetration weld joints; 2WPP17W3 holes # 1 and #3 this QA Inspector was informed by QC Inspector Mike Johnson he had completed and accepted the visual MT inspection of the bottom of the welds. This QA Inspector performed a random visual verification and the work appeared to comply with the contract requirements.

Summary of Conversations:

As noted above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy (510) 385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Hager,Craig	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer
